

What is claimed is:

1. A double electrode connector comprising:

a double-electrode connector housing comprising a base having two holes therein of predetermined diameters arranged at predetermined location in the housing, with a first of the two holes associated with a first connector and a second of the two holes associated with a second connector of the double-electrode;

a pair of biasing elements arranged along a surface of the housing so that each one of the pair of biasing elements is adapted for biasing against one of a pair of electrode studs inserted in a respective hole of the two holes in the housing;

a case assembly comprising a housing, twin-wire cable, and a pair of metal contacts, wherein each one of the pair of metal contacts is crimped to one of a first conductor and second conductor of the twin-wire cable.

2. The connector according to claim 1, wherein the first connector and the second connector connect to the respective one of the pair of electrode studs with zero insertion force.

3. The double connector according to claim 1, wherein the contact of each of the biasing elements comprises a tab adapted to bias against a respective electrode stud of the pair of electrode studs.

4. The double connector according to claim 3, wherein the biasing elements comprise leaf springs, and each of the biasing elements further comprises a handle attached to the leaf spring that protrudes out of the connector housing.

5. The double connector according to claim 4, wherein at least one of one the handles and a bend relief is color-coded for connection to specific electrodes.

6. The double connector according to claim 1, wherein the case housing includes a cover and a base, and both are comprised of injection-molded plastic.

7. The double connector according to claim 1, wherein the predetermined diameters of the two holes formed in the base are sized such that one of the two holes is smaller than the other of the two holes.

8. The double connector according to claim 1, wherein the predetermined diameters of the two holes are sized to correspond with a diameter of at least one of the electrode studs.

9. The double connector according to claim 4, wherein each of the biasing elements includes two or more tabs arranged opposite to each other.

10. The double connector according to claim 4, wherein in a first position the handle is arranged so to as to permit an electrode stud to be inserted in one of the two holes in the base.

11. The double connector according to claim 10, wherein in a second position, the handle is arranged so as to bias the leaf spring against the electrode stud inserted in one of the two holes in the base.

12. The double connector according to claim 1, further comprising self-storage knobs that protrude from the two holes in the base to allow attachment to another double connector.

13. The double connector according to claim 1, wherein the connector housing has at least one icon arranged thereon to facilitate a connection with a double electrode.

14. The double connector according to claim 11, wherein the first position of the handle the leaf spring provides no insertion force downward toward a patient's neck and/or torso.

15. The double connector according to claim 11, wherein in a second position of the handle the leaf spring provides a biasing force tangential to the neck and/or torso of a patient.

16. The double connector according to claim 4, wherein the housing has two pairs of recesses that each retain an end of one of the respective handles while allowing the handle to pivot.

17. An impedance cardiography connection system comprising four of the double connectors according to claim 1, and wherein a number of branches connected to an instrument by a single connector totals four.

18. A method of making a double electrode connector, connecting the steps of:
(a) providing a connector housing comprising a base having two holes therein of predetermined diameters arranged at predetermined location in the housing, with a first of the

two holes associated with a first connector and a second of the two holes associated with a second connector of the double-electrode connector;

(b) arranging a pair of biasing elements along a surface of the housing so that each one of the pair of biasing elements is adapted for biasing against an electrode stud inserted in a respective hole of the two holes in the housing;

(c) providing a case assembly comprising a twin wire cable, a pair of metal contacts, and connecting each one of the pair of metal contacts to one of the first conductor wire and second conductor wire, and a bend relief connecting the twin wire cable to the housing of the case assembly.

19. The method according to claim 18, wherein the first connector and the second connector connect to the electrode studs with zero-insertion-force.

20. The method according to claim 18, wherein the first connector and the second connector connect to the electrode studs by snapping on.

21. The method according to claim 18, wherein the first conductor wire and second conductor wire of the twin-wire cable are connected to the metal contacts by crimping.